

Impact Based Warning Experimental Product



Slide 1: 2011 proved to be a historic year in terms of the number of tornado fatalities across the United States. Key findings from storm assessments showed that a majority of people identified local outdoor warning systems as their first source of warning and they sought confirmation from additional sources before seeking shelter. Another key finding was that credible risk signals prompt people to take protective actions.

The following slides will outline an experiment by 38 National Weather Service offices that will enhance our current convective warnings to better communicate weather threats to media and Emergency Managers, in order to facilitate improved public response and decision making.

Slide 2: This is actually an expansion of a smaller, nearly identical experiment undertaken in 2012. Multiple severe weather events in 2012, including the Great Plains tornado outbreak of April 14th, provided sufficient positive feedback to favor the expansion to a much larger area for 2013.

The experiment will officially be expanded from 5 to 38 National Weather Service Offices on April 1^{st} , 2013 and will continue through November 30^{th} .

Slide 3: The impact based warning experimental product is designed to relay more information to the media and emergency management communities during life-threatening weather events, all while making the information easy to access and identify. The project leverages this additional information in an attempt to achieve the ultimate project goal of improved public response and decision making during life threatening weather situations.

Slide 4: The intended outcomes of this product will be to optimize the convective warning system within the existing structure by focusing on impact-based information; to motivate proper response to warnings by distinguishing situational urgency; to realign the warning message in terms of societal impacts, and to more concisely communicate recommended action and precautions. Throughout use of the product, the National Weather Service will evaluate the ability to distinguish between low impact and high impact events.

Slide 5: The information added to convective warnings will be evident within the third bullet of warning text, through Hazard, Source and Impact information. Additional information will also be placed at the bottom of the warning with the addition of the tornado and tornado damage threat tags. Information will be presented within these threat tags to provide quick identification of storm characteristics, including the presence of an observed tornado, maximum expected hail size, as well indications of forecaster confidence regarding tornado damage potential.

The threat tags are designed to communicate hazard and risk information only, and are not designed to identify tornado intensity in relationship to an EF-scale.

Slide 6: The goal of the impact based warning products are that these enhancements will improve communication of critical information, make it easier to quickly identify the most valuable information and enable prioritization of key warnings. The enhancements will also provide different levels of risk within the same product, enabling the National Weather Service to express a confidence level of potential impacts and risk.

Slide 7: The impact based warning product will be independently evaluated by the social science research group, Weather and Emergency Management, through a timely and repetitive process. Media partners, emergency management, the public, and National Weather Service forecasters will provide feedback via focus groups and surveys throughout the experiment.

This feedback will be used to help analyze the success of the experimental product, and also to assist in identifying areas where further enhancements can be made to reach the goal of providing the best possible service during life threatening weather.

Slide 8: To provide feedback directly to the National Weather Service regarding this experimental product, please complete the satisfaction survey at one of the links below or contact Central Region Weather Program Manager, Jim Keeney.

Jim Keeney

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